U. S. Department of Health and Human Services
Public Health Service
Food and Drug Administration
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Chapter

4

Equipment, Utensils, and Linens

Parts

4-1 MATERIALS FOR CONSTRUCTION AND REPAIR

Subparts

Multiuse

4-101.11 Characteristics.*

Materials that are used in the construction of utensils and food-contact surfaces of equipment may not allow the migration of deleterious substances or impart colors, odors, or tastes to food and under normal use conditions shall be:

(A) Safe;

(B) Durable, corrosion-resistant, and nonabsorbent;[N]

(C) Sufficient in weight and thickness to withstand repeated warewashing;[N]

(D) Finished to have a smooth, easily cleanable surface;[N] and

(E) Resistant to pitting, chipping, crazing, scratching, scoring, distortion, and decomposition.[N]

4-101.12 Cast Iron, Use Limitation.

(A) Except as specified in ¶¶ (B) and (C) of this section, cast iron may not be used for utensils or food-contact surfaces of equipment.

(B) *Cast iron may be used as a surface for cooking.*

(C) *Cast iron may be used in utensils for serving food if the utensils are used only as part of an uninterrupted process from cooking through service.*

4-101.13 Lead in Ceramic, China, and Crystal Utensils, Use Limitation.

Ceramic, china, crystal utensils, and decorative utensils such as hand painted ceramic or china that are used in contact with food shall be lead-free or contain levels of lead not exceeding the limits of the following utensil categories:

Utensil Category	Description	Maximum Lead mg/L
Hot Beverage Mugs	Coffee Mugs	0.5
Large Hollowware	Bowls greater than or equal to 1.1 L (1.16 QT)	1
Small Hollowware	Bowls < 1.1 L (1.16 QT)	2.0
Flat Utensils	Plates, Saucers	3.0

4-101.14 Copper, Use Limitation.*

(A) Except as specified in ¶ (B) of this section, copper and copper alloys such as brass may not be used in contact with a food that has a pH below 6 such as vinegar, fruit juice, or wine or for a fitting or tubing installed between a backflow prevention device and a carbonator.

(B) *Copper and copper alloys may be used in contact with beer brewing ingredients that have a pH below 6 in the prefermentation and fermentation steps of a beer brewing operation such as a brewpub or microbrewery.*

4-101.15 Galvanized Metal, Use Limitation.*

Galvanized metal may not be used for utensils or food-contact surfaces of equipment that are used in contact with acidic food.

4-101.16 Sponges, Use Limitation.

Sponges may not be used in contact with cleaned and sanitized or in-use food-contact surfaces.

4-101.17 Lead in Pewter Alloys, Use Limitation.

Pewter alloys containing lead in excess of 0.05% may not be used as a food-contact surface.

4-101.18 Lead in Solder and Flux, Use Limitation.

Solder and flux containing lead in excess of 0.2% may not be used as a food-contact surface.

4-101.19 Wood, Use Limitation.

(A) Except as specified in ¶¶ (B), (C), and (D) of this section, wood and wood wicker may not be used as a food-contact surface.

(B) *Hard maple or an equivalently hard, close-grained wood may be used for:*

(1) *Cutting boards; cutting blocks; bakers' tables; and utensils such as rolling pins, doughnut dowels, salad bowls, and chopsticks; and*

(2) *Wooden paddles used in confectionery operations for pressure scraping kettles when manually preparing confections at a temperature of 110°C (230°F) or above.*

(C) *Whole, uncut, raw fruits and vegetables, and nuts in the shell may be kept in the wood shipping containers in which they were received, until the fruits, vegetables, or nuts are used.*

(D) *If the nature of the food requires removal of rinds, peels, husks, or shells before consumption, the whole, uncut, raw food may be kept in:*

(1) *Untreated wood containers; or*

(2) *Treated wood containers if the containers are treated with a preservative that meets the requirements specified in 21 CFR 178.3800 Preservatives for wood.*

4-101.110 Nonstick Coatings, Use Limitation.

Multiuse kitchenware such as frying pans, griddles, sauce pans, cookie sheets, and waffle bakers that have a perfluorocarbon resin coating shall be used with nonscoring or nonscratching utensils and cleaning aids.

4-101.111 Nonfood-Contact Surfaces.

Nonfood-contact surfaces of equipment that are exposed to splash, spillage, or other food soiling or that require frequent cleaning shall be constructed of a corrosion-resistant, nonabsorbent, and smooth material.

Single-Service and Single-Use

4-102.11 Characteristics.*

Materials that are used to make single-service and single-use articles:

(A) May not:

(1) Allow the migration of deleterious substances, or

(2) Impart colors, odors, or tastes to food;[N] and

(B) Shall be:

(1) Safe, and

(2) Clean.[N]

4-2 DESIGN AND CONSTRUCTION

Subparts

Durability and Strength

4-201.11 Equipment and Utensils.

Equipment and utensils shall be designed and constructed to be durable and to retain their characteristic qualities under normal use conditions.

4-201.12 Food Temperature Measuring Devices.*

Food temperature measuring devices may not have sensors or stems constructed of glass, *except that thermometers with glass sensors or stems that are encased in a shatterproof coating such as candy thermometers may be used.*

Cleanability

4-202.11 Food-Contact Surfaces.*

(A)Multiuse food-contact surfaces shall be:

(1) Smooth;

(2) Free of breaks, open seams, cracks, chips, inclusions, pits, and similar imperfections;

(3) Free of sharp internal angles, corners, and crevices;

(4) Finished to have smooth welds and joints; and

(5) Except as specified in ¶ (B) of this section, accessible for cleaning and inspection by one of the following methods:

(a) Without being disassembled,

(b) By disassembling without the use of tools, or

(c) By easy disassembling with the use of handheld tools commonly available to maintenance and cleaning personnel such as screwdrivers, pliers, open-end wrenches, and Allen wrenches.

(B) *Subparagraph (A)(5) of this section does not apply to cooking oil storage tanks, distribution lines for cooking oils, or beverage syrup lines or tubes.*

4-202.12 CIP Equipment.

(A) CIP equipment shall meet the characteristics specified under § 4-202.11 and shall be designed and constructed so that:

(1) Cleaning and sanitizing solutions circulate throughout a fixed system and contact all interior food-contact surfaces, and

(2) The system is self-draining or capable of being completely drained of cleaning and sanitizing solutions; and

(B) CIP equipment that is not designed to be disassembled for cleaning shall be designed with inspection access points to ensure that all interior food-contact surfaces throughout the fixed system are being effectively cleaned.

4-202.13 "V" Threads, Use Limitation.

Except for hot oil cooking or filtering equipment, "V" type threads may not be used on food-contact surfaces.

4-202.14 Hot Oil Filtering Equipment.

Hot oil filtering equipment shall meet the characteristics specified under § 4-202.11 or § 4-202.12 and shall be readily accessible for filter replacement and cleaning of the filter.

4-202.15 Can Openers.

Cutting or piercing parts of can openers shall be readily removable for cleaning and for replacement.

4-202.16 Nonfood-Contact Surfaces.

Nonfood-contact surfaces shall be free of unnecessary ledges, projections, and crevices, and designed and constructed to allow easy cleaning and to facilitate maintenance.

4-202.17 Kick Plates, Removable.

Kick plates shall be designed so that the areas behind them are accessible for inspection and cleaning by being:

(A) Removable by one of the methods specified under Subparagraph 4-202.11(A)(5) or capable of being rotated open; and

(B) Removable or capable of being rotated open without unlocking equipment doors.

4-202.18 Ventilation Hood Systems, Filters.

Filters or other grease extracting equipment shall be designed to be readily removable for cleaning and replacement if not designed to be cleaned in place.

Accuracy

4-203.11 Temperature Measuring Devices, Food.

(A) Food temperature measuring devices that are scaled only in Celsius or dually scaled in Celsius and Fahrenheit shall be accurate to ±1°C in the intended range of use.

(B) Food temperature measuring devices that are scaled only in Fahrenheit shall be accurate to ±2°F in the intended range of use.

4-203.12 Temperature Measuring Devices, Ambient Air and Water.

(A) Ambient air and water temperature measuring devices that are scaled in Celsius or dually scaled in Celsius and Fahrenheit shall be designed to be easily readable and accurate to ±1.5°C in the intended range of use.

(B) Ambient air and water temperature measuring devices that are scaled only in Fahrenheit shall be accurate to ±3°F in the intended range of use.

4-203.13 Pressure Measuring Devices, Mechanical Warewashing Equipment.

Pressure measuring devices that display the pressures in the water supply line for the fresh hot water sanitizing rinse shall have increments of 7 kilopascals (1 pounds per square inch) or smaller and shall be accurate to ± 14 kilopascals (± 2 pounds per square inch) in the 100-170 kilopascals (15-25 pounds per square inch) range.

Functionality

4-204.11 Ventilation Hood Systems, Drip Prevention.

Exhaust ventilation hood systems in food preparation and warewashing areas including components such as hoods, fans, guards, and ducting shall be designed to prevent grease or condensation from draining or dripping onto food, equipment, utensils, linens, and single-service and single-use articles.

4-204.12 Equipment Openings, Closures and Deflectors.

(A) A cover or lid for equipment shall overlap the opening and be sloped to drain.

(B) An opening located within the top of a unit of equipment that is designed for use with a cover or lid shall be flanged upward at least 5 millimeters (two-tenths of an inch).

(C) Except as specified under ¶ (D) of this section, fixed piping, temperature measuring devices, rotary shafts, and other parts extending into equipment shall be provided with a watertight joint at the point where the item enters the equipment.

(D) If a watertight joint is not provided:

(1) The piping, temperature measuring devices, rotary shafts, and other parts extending through the

openings shall be equipped with an apron designed to deflect condensation, drips, and dust from openings into the food; and

(2) The opening shall be flanged as specified under ¶ (B) of this section.

4-204.13 Dispensing Equipment, Protection of Equipment and Food.

In equipment that dispenses or vends liquid food or ice in unpackaged form:

(A) The delivery tube, chute, orifice, and splash surfaces directly above the container receiving the food shall be designed in a manner, such as with barriers, baffles, or drip aprons, so that drips from condensation and splash are diverted from the opening of the container receiving the food;

(B) The delivery tube, chute, and orifice shall be protected from manual contact such as by being recessed;

(C) The delivery tube or chute and orifice of equipment used to vend liquid food or ice in unpackaged form to self-service consumers shall be designed so that the delivery tube or chute and orifice are protected from dust, insects, rodents, and other contamination by a self-closing door if the equipment is:

(1) Located in an outside area that does not otherwise afford the protection of an enclosure against the rain, windblown debris, insects, rodents, and other contaminants that are present in the environment, or

(2) Available for self-service during hours when it is not under the full-time supervision of a food employee; and

(D) The dispensing equipment actuating lever or mechanism and filling device of consumer self-service beverage dispensing equipment shall be designed to prevent contact with the lip-contact surface of glasses or cups that are refilled.

4-204.14 Vending Machine, Vending Stage Closure.

The dispensing compartment of a vending machine including a machine that is designed to vend prepackaged snack food that is not potentially hazardous such as chips, party mixes, and pretzels shall be equipped with a self-closing door or cover if the machine is:

(A) Located in an outside area that does not otherwise afford the protection of an enclosure against the rain, windblown debris, insects, rodents, and other contaminants that are present in the environment; or

(B) Available for self-service during hours when it is not under the full-time supervision of a food employee.

4-204.15 Bearings and Gear Boxes, Leakproof.

Equipment containing bearings and gears that require lubricants shall be designed and constructed so that the lubricant can not leak, drip, or be forced into food or onto food-contact surfaces.

4-204.16 Beverage Tubing, Separation.

Beverage tubing and cold-plate beverage cooling devices may not be installed in contact with stored ice. *This section does not apply to cold plates that are constructed integrally with an ice storage bin.*

4-204.17 Ice Units, Separation of Drains.

Liquid waste drain lines may not pass through an ice machine or ice storage bin.

4-204.18 Condenser Unit, Separation.

If a condenser unit is an integral component of equipment, the condenser unit shall be separated from the food and food storage space by a dustproof barrier.

4-204.19 Can Openers on Vending Machines.

Cutting or piercing parts of can openers on vending machines shall be protected from manual contact, dust, insects, rodents, and other contamination.

4-204.110 Molluscan Shellfish Tanks.

(A) Except as specified under ¶ (B) of this section, molluscan shellfish life support system display tanks may not be used to display shellfish that are offered for human consumption and shall be conspicuously marked so that it is obvious to the consumer that the shellfish are for display only.

(B) Molluscan shellfish life-support system display tanks that are used to store and display shellfish that are offered for human consumption shall be operated and maintained in accordance with a variance granted by the regulatory authority as specified in § 8-103.10 and a HACCP plan that:

(1) Is submitted by the permit holder and approved as specified under § 8-103.11; and

(2) Ensures that:

(a) Water used with fish other than molluscan shellfish does not flow into the molluscan tank,

(b) The safety and quality of the shellfish as they were received are not compromised by the use of the tank, and

(c) The identity of the source of the shellstock is retained as specified under § 3-203.12.

4-204.111 Vending Machines, Automatic Shutoff.*

(A) A machine vending potentially hazardous food shall have an automatic control that prevents the machine from vending food:

(1) If there is a power failure, mechanical failure, or other condition that results in an internal machine temperature that can not maintain food temperatures as specified under Chapter 3; and

(2) If a condition specified under Subparagraph (A)(1) of this section occurs, until the machine is serviced and restocked with food that has been maintained at temperatures specified under Chapter 3.

(B) When the automatic shutoff within a machine vending potentially hazardous food is activated:

(1) In a refrigerated vending machine, the ambient temperature may not exceed 5°C (41°F) or 7°C (45°F) as specified under ¶ 3-501.16(C) for more than 30 minutes immediately after the machine is filled, serviced, or restocked; or

(2) In a hot holding vending machine, the ambient temperature may not be less than 60°C (140°F) for more than 120 minutes immediately after the machine is filled, serviced, or restocked.

4-204.112 Temperature Measuring Devices.

(A) In a mechanically refrigerated or hot food storage unit, the sensor of a temperature measuring device shall be located to measure the air temperature in the warmest part of a mechanically refrigerated unit and in the coolest part of a hot food storage unit.

(B) Except as specified in ¶ (C) of this section, cold or hot holding equipment used for potentially hazardous food shall be designed to include and shall be equipped with at least one integral or permanently affixed temperature measuring device that is located to allow easy viewing of the device's temperature display.

(C) *Paragraph (B) of this section does not apply to equipment for which the placement of a temperature measuring device is not a practical means for measuring the ambient air surrounding the food because of the design, type, and use of the equipment, such as calrod units, heat lamps, cold plates, bainmaries, steam tables, insulated food transport containers, and salad bars.*

(D) Temperature measuring devices shall be designed to be easily readable.

(E) Food temperature measuring devices and water temperature measuring devices on warewashing machines shall have a numerical scale, printed record, or digital readout in increments no greater than 1°C or 2°F in the intended range of use.

4-204.113 Warewashing Machine, Data Plate Operating Specifications.

A warewashing machine shall be provided with an easily accessible and readable data plate affixed to the machine by the manufacturer that indicates the machine's design and operating specifications including the:

(A) Temperatures required for washing, rinsing, and sanitizing;

(B) Pressure required for the fresh water sanitizing rinse *unless the machine is designed to use only a pumped sanitizing rinse;* and

(C) Conveyor speed for conveyor machines or cycle time for stationary rack machines.

4-204.114 Warewashing Machines, Internal Baffles.

Warewashing machine wash and rinse tanks shall be equipped with baffles, curtains, or other means to minimize internal cross contamination of the solutions in wash and rinse tanks.

4-204.115 Warewashing Machines, Temperature Measuring Devices.

A warewashing machine shall be equipped with a temperature measuring device that indicates the temperature of the water:

(A) In each wash and rinse tank; and

(B) As the water enters the hot water sanitizing final rinse manifold or in the chemical sanitizing solution tank.

4-204.116 Manual Warewashing Equipment, Heaters and Baskets.

If hot water is used for sanitization in manual warewashing operations, the sanitizing compartment of the sink shall be:

(A) Designed with an integral heating device that is capable of maintaining water at a temperature not less than 77°C (171°F); and

(B) Provided with a rack or basket to allow complete immersion of equipment and utensils into the hot water.

4-204.117 Warewashing Machines, Sanitizer Level Indicator.

A warewashing machine that uses a chemical for sanitization and that is installed after adoption of this Code by the regulatory authority, shall be equipped with a device that indicates audibly or visually when more chemical sanitizer needs to be added.

4-204.118 Warewashing Machines, Flow Pressure Device.

(A) Warewashing machines that provide a fresh hot water sanitizing rinse shall be equipped with a pressure gauge or similar device such as a transducer that measures and displays the water pressure in the supply line immediately before entering the warewashing machine; and

(B) If the flow pressure measuring device is upstream of the fresh hot water sanitizing rinse control valve, the device shall be mounted in a 6.4 millimeter or one-fourth inch Iron Pipe Size (IPS) valve.

(C) *Paragraphs (A) and (B) of this section do not apply to a machine that uses only a pumped or recirculated sanitizing rinse.*

4-204.119 Warewashing Sinks and Drainboards, Self-Draining.

Sinks and drainboards of warewashing sinks and machines shall be self-draining.

4-204.120 Equipment Compartments, Drainage.

Equipment compartments that are subject to accumulation of moisture due to conditions such as condensation, food or beverage drip, or water from melting ice shall be sloped to an outlet that allows complete draining.

4-204.121 Vending Machines, Liquid Waste Products.

(A) Vending machines designed to store beverages that are packaged in containers made from paper products shall be equipped with diversion devices and retention pans or drains for container leakage.

(B) Vending machines that dispense liquid food in bulk shall be:

(1) Provided with an internally mounted waste receptacle for the collection of drip, spillage, overflow, or other internal wastes; and

(2) Equipped with an automatic shutoff device that will place the machine out of operation before the waste receptacle overflows.

(C) Shutoff devices specified under Subparagraph (B)(2) of this section shall prevent water or liquid food from continuously running if there is a failure of a flow control device in the water or liquid food system or waste accumulation that could lead to overflow of the waste receptacle.

4-204.122 Case Lot Handling Equipment, Moveability.

Equipment, such as dollies, pallets, racks, and skids used to store and transport large quantities of packaged foods received from a supplier in a cased or overwrapped lot, shall be designed to be moved by hand or by conveniently available equipment such as hand trucks and forklifts.

4-204.123 Vending Machine Doors and Openings.

(A) Vending machine doors and access opening covers to food and container storage spaces shall be tight-fitting so that the space along the entire interface between the doors or covers and the cabinet of the machine, if the doors or covers are in a closed position, is no greater than 1.5 millimeters or one-sixteenth inch by:

(1) Being covered with louvers, screens, or materials that provide an equivalent opening of not greater than 1.5 millimeters or one-sixteenth inch. Screening of 12 or more mesh to 2.5 centimeters (12 mesh to 1 inch) meets this requirement;

(2) Being effectively gasketed;

(3) Having interface surfaces that are at least 13 millimeters or one-half inch wide; or

(4) Jambs or surfaces used to form an L-shaped entry path to the interface.

(B) Vending machine service connection openings through an exterior wall of a machine shall be

closed by sealants, clamps, or grommets so that the openings are no larger than 1.5 millimeters or one-sixteenth inch.

Acceptability

4-205.10 Food Equipment, Certification and Classification.

Food equipment that is certified or classified for sanitation by an American National Standards Institute (ANSI)-accredited certification program will be deemed to comply with Parts 4-1 and 4-2 of this chapter.

4-3 NUMBERS AND CAPACITIES

Subparts

Equipment

4-301.11 Cooling, Heating, and Holding Capacities.

Equipment for cooling and heating food, and holding cold and hot food, shall be sufficient in number and capacity to provide food temperatures as specified under Chapter 3.

4-301.12 Manual Warewashing, Sink Compartment Requirements.

(A) Except as specified in ¶ (C) of this section, a sink with at least 3 compartments shall be provided for manually washing, rinsing, and sanitizing equipment and utensils.

(B) Sink compartments shall be large enough to accommodate immersion of the largest equipment and utensils. If equipment or utensils are too large for the warewashing sink, a warewashing machine or alternative equipment as specified in ¶ (C) of this section shall be used.

(C) *Alternative manual warewashing equipment may be used when there are special cleaning needs or constraints and its use is approved. Alternative manual warewashing equipment may include:*

(1) *High-pressure detergent sprayers;*

(2) *Low- or line-pressure spray detergent foamers;*

(3) *Other task-specific cleaning equipment;*

(4) *Brushes or other implements;*

(5) *2-compartment sinks as specified under ¶¶ (D) and (E) of this section; or*

(6) *Receptacles that substitute for the compartments of a multicompartment sink.*

(D) Before a 2-compartment sink is used:

(1) The permit holder shall have its use approved; and

(2) The nature of warewashing shall be limited to batch operations for cleaning kitchenware such as between cutting one type of raw meat and another or cleanup at the end of a shift, and:

(a) The number of items to be cleaned shall be limited,

(b) The cleaning and sanitizing solutions shall be made up immediately before use and drained immediately after use, and

(c) A detergent-sanitizer shall be used to sanitize and shall be applied as specified under § 4-501.115, or

(d) A hot water sanitization immersion step shall be used as specified under ¶ 4-603.16(C).

(E) A 2-compartment sink may not be used for warewashing operations where cleaning and sanitizing solutions are used for a continuous or intermittent flow of kitchenware or tableware in an ongoing warewashing process.

4-301.13 Drainboards.

Drainboards, utensil racks, or tables large enough to accommodate all soiled and cleaned items that may accumulate during hours of operation shall be provided for necessary utensil holding before cleaning and after sanitizing.

4-301.14 Ventilation Hood Systems, Adequacy.

Ventilation hood systems and devices shall be sufficient in number and capacity to prevent grease or condensation from collecting on walls and ceilings.

4-301.15 Clothes Washers and Dryers.

(A) Except as specified in ¶ (B) of this section, if work clothes or linens are laundered on the premises, a mechanical clothes washer and dryer shall be provided and used.

(B) *If on-premises laundering is limited to wiping cloths intended to be used moist, or wiping cloths are air-dried as specified under § 4-901.12, a mechanical clothes washer and dryer need not be provided.*

Utensils, Temperature Measuring Devices, and Testing Devices

4-302.11 Utensils, Consumer Self-Service.

A food dispensing utensil shall be available for each container displayed at a consumer self-service unit such as a buffet or salad bar.

4-302.12 Food Temperature Measuring Devices.

Food temperature measuring devices shall be provided and readily accessible for use in ensuring attainment and maintenance of food temperatures as specified under Chapter 3.

4-302.13 Temperature Measuring Devices, Manual Warewashing.

In manual warewashing operations, a temperature measuring device shall be provided and readily accessible for frequently measuring the washing and sanitizing temperatures.

4-302.14 Sanitizing Solutions, Testing Devices.

A test kit or other device that accurately measures the concentration in mg/L of sanitizing solutions shall be provided.

4-4 LOCATION AND INSTALLATION

Subparts

Location

4-401.11 Equipment, Clothes Washers and Dryers, and Storage Cabinets, Contamination Prevention.

(A) Except as specified in ¶ (B) of this section, equipment, a cabinet used for the storage of food, or a cabinet that is used to store cleaned and sanitized equipment, utensils, laundered linens, and single-service and single-use articles may not be located:

(1) In locker rooms;

(2) In toilet rooms;

(3) In garbage rooms;

(4) In mechanical rooms;

(5) Under sewer lines that are not shielded to intercept potential drips;

(6) Under leaking water lines including leaking automatic fire sprinkler heads or under lines on which water has condensed;

(7) Under open stairwells; or

(8) Under other sources of contamination.

(B) *A storage cabinet used for linens or single-service or single-use articles may be stored in a locker room.*

(C) If a mechanical clothes washer or dryer is provided, it shall be located so that the washer or dryer is protected from contamination and only where there is no exposed food; clean equipment, utensils, and linens; and unwrapped single-service and single-use articles.

Installation

4-402.11 Fixed Equipment, Spacing or Sealing.

(A) Equipment that is fixed because it is not easily movable shall be installed so that it is:

(1) Spaced to allow access for cleaning along the sides, behind, and above the equipment;

(2) Spaced from adjoining equipment, walls, and ceilings a distance of not more than 1 millimeter or one thirty-second inch; or

(3) Sealed to adjoining equipment or walls, if the equipment is exposed to spillage or seepage.

(B) Table-mounted equipment that is not easily movable shall be installed to allow cleaning of the equipment and areas underneath and around the equipment by being:

(1) Sealed to the table; or

(2) Elevated on legs as specified under ¶ 4-402.12(D).

4-402.12 Fixed Equipment, Elevation or Sealing.

(A) Except as specified in ¶¶ (B) and (C) of this section, floor-mounted equipment that is not easily movable shall be sealed to the floor or elevated on legs that provide at least a 15 centimeter (6 inch)

clearance between the floor and the equipment.

(B) *If no part of the floor under the floor-mounted equipment is more than 15 centimeters (6 inches) from the point of cleaning access, the clearance space may be only 10 centimeters (4 inches).*

(C) *This section does not apply to display shelving units, display refrigeration units, and display freezer units located in the consumer shopping areas of a retail food store, if the floor under the units is maintained clean.*

(D) Except as specified in ¶ (E) of this section, table-mounted equipment that is not easily movable shall be elevated on legs that provide at least a 10 centimeter (4 inch) clearance between the table and the equipment.

(E) *The clearance space between the table and table-mounted equipment may be*:

(1) *7.5 centimeters (3 inches) if the horizontal distance of the table top under the equipment is no more than 50 centimeters (20 inches) from the point of access for cleaning; or*

(2) *5 centimeters (2 inches) if the horizontal distance of the table top under the equipment is no more than 7.5 centimeters (3 inches) from the point of access for cleaning.*

4-5 MAINTENANCE AND OPERATION

Subparts

Equipment

4-501.11 Good Repair and Proper Adjustment.

(A) Equipment shall be maintained in a state of repair and condition that meets the requirements specified under Parts 4-1 and 4-2.

(B) Equipment components such as doors, seals, hinges, fasteners, and kick plates shall be kept intact, tight, and adjusted in accordance with manufacturer's specifications.

(C) Cutting or piercing parts of can openers shall be kept sharp to minimize the creation of metal fragments that can contaminate food when the container is opened.

4-501.12 Cutting Surfaces.

Surfaces such as cutting blocks and boards that are subject to scratching and scoring shall be resurfaced if they can no longer be effectively cleaned and sanitized, or discarded if they are not capable of being resurfaced.

4-501.13 Microwave Ovens.

Microwave ovens shall meet the safety standards specified in 21 CFR 1030.10 Microwave ovens.

4-501.14 Warewashing Equipment, Cleaning Frequency.

A warewashing machine; the compartments of sinks, basins, or other receptacles used for washing and rinsing equipment, utensils, or raw foods, or laundering wiping cloths; and drainboards or other equipment used to substitute for drainboards as specified under § 4-301.13 shall be cleaned:

(A) Before use;

(B) Throughout the day at a frequency necessary to prevent recontamination of equipment and utensils and to ensure that the equipment performs its intended function; and

(C) If used, at least every 24 hours.

4-501.15 Warewashing Machines, Manufacturers' Operating Instructions.

(A) A warewashing machine and its auxiliary components shall be operated in accordance with the machine's data plate and other manufacturer's instructions.

(B) A warewashing machine's conveyor speed or automatic cycle times shall be maintained accurately timed in accordance with manufacturer's specifications.

4-501.16 Warewashing Sinks, Use Limitation.

(A) A warewashing sink may not be used for handwashing.

(B) If a warewashing sink is used to wash wiping cloths, wash produce, or thaw food, the sink shall be cleaned as specified under § 4-501.14 before and after each time it is used to wash wiping cloths or wash produce or thaw food. Sinks used to wash or thaw food shall be sanitized as specified under Part 4-7 before and after using the sink to wash produce or thaw food.

4-501.17 Warewashing Equipment, Cleaning Agents.

When used for warewashing, the wash compartment of a sink, mechanical warewasher, or wash receptacle of alternative manual warewashing equipment as specified in ¶ 4-301.12(C), shall contain a wash solution of soap, detergent, acid cleaner, alkaline cleaner, degreaser, abrasive cleaner, or other cleaning agent according to the cleaning agent manufacturer's label instructions.

4-501.18 Warewashing Equipment, Clean Solutions.

The wash, rinse, and sanitize solutions shall be maintained clean.

4-501.19 Manual Warewashing Equipment, Wash Solution Temperature.

The temperature of the wash solution in manual warewashing equipment shall be maintained at not less than 43°C (110°F) or the temperature specified on the cleaning agent manufacturer's label instructions.

4-501.110 Mechanical Warewashing Equipment, Wash Solution Temperature.

(A) The temperature of the wash solution in spray type warewashers that use hot water to sanitize may not be less than:

(1) For a stationary rack, single temperature machine, 74°C (165°F);

(2) For a stationary rack, dual temperature machine, 66°C (150°F);

(3) For a single tank, conveyor, dual temperature machine, 71°C (160°F); or

(4) For a multitank, conveyor, multitemperature machine, 66°C (150°F).

(B) The temperature of the wash solution in spray-type warewashers that use chemicals to sanitize may not be less than 49°C (120°F).

4-501.111 Manual Warewashing Equipment, Hot Water Sanitization Temperatures.*

If immersion in hot water is used for sanitizing in a manual operation, the temperature of the water shall be maintained at 77°C (171°F) or above.

4-501.112 Mechanical Warewashing Equipment, Hot Water Sanitization Temperatures.

(A) Except as specified in ¶ (B) of this section, in a mechanical operation, the temperature of the fresh hot water sanitizing rinse as it enters the manifold may not be more than 90°C (194°F), or less than:

(1) For a stationary rack, single temperature machine, 74°C (165°F); or

(2) For all other machines, 82°C (180°F).

(B) *The maximum temperature specified under ¶ (A) of this section, does not apply to the high pressure and temperature systems with wand-type, hand-held, spraying devices used for the in-place cleaning and sanitizing of equipment such as meat saws.*

4-501.113 Mechanical Warewashing Equipment, Sanitization Pressure.

The flow pressure of the fresh hot water sanitizing rinse in a warewashing machine may not be less than 100 kilopascals (15 pounds per square inch) or more than 170 kilopascals (25 pounds per square inch) as measured in the water line immediately downstream or upstream from the fresh hot water sanitizing rinse control valve.

4-501.114 Manual and Mechanical Warewashing Equipment, Chemical Sanitization - Temperature, pH, Concentration, and Hardness

A chemical sanitizer used in a sanitizing solution for a manual or mechanical operation at exposure times specified under ¶ 4-703.11(C) shall be listed in 21 CFR 178.1010 Sanitizing solutions, shall be used in accordance with the EPA-approved manufacturer's label use instructions, and shall be used as follows:

(A) A chlorine solution shall have a minimum temperature based on the concentration and pH of the solution as listed in the following chart;

Minimum Concentration	**Minimum Temperature**	
mg/L	pH 10 or less °C (° F)	pH 8 or less °C (°F)
25	49 (120)	49 (120)
50	38 (100)	24 (75)
100	13 (55)	13 (55)

(B) An iodine solution shall have a:

(1) Minimum temperature of 24°C (75°F),

(2) pH of 5.0 or less or a pH no higher than the level for which the manufacturer specifies the solution is effective, and

(3) Concentration between 12.5 mg/L and 25 mg/L;

(C) A quaternary ammonium compound solution shall:

(1) Have a minimum temperature of 24°C (75°F),

(2) Have a concentration as specified under § 7-204.11 and as indicated by the manufacturer's use directions included in the labeling, and

(3) Be used only in water with 500 mg/L hardness or less or in water having a hardness no greater than specified by the manufacturer's label;

(D) If another solution of a chemical specified under ¶¶ (A)-(C) of this section is used, the permit holder shall demonstrate to the regulatory authority that the solution achieves sanitization and the use of the solution shall be approved; or

(E) If a chemical sanitizer other than chlorine, iodine, or a quaternary ammonium compound is used, it shall be applied in accordance with the manufacturer's use directions included in the labeling.

4-501.115 Manual Warewashing Equipment, Chemical Sanitization Using Detergent-Sanitizers.

If a detergent-sanitizer is used to sanitize in a cleaning and sanitizing procedure where there is no distinct water rinse between the washing and sanitizing steps, the agent applied in the sanitizing step shall be the same detergent-sanitizer that is used in the washing step.

4-501.116 Warewashing Equipment, Determining Chemical Sanitizer Concentration.

Concentration of the sanitizing solution shall be accurately determined by using a test kit or other device.

Utensils and Temperature and Pressure Measuring Devices

4-502.11 Good Repair and Calibration.

(A) Utensils shall be maintained in a state of repair or condition that complies with the requirements specified under Parts 4-1 and 4-2 or shall be discarded.

(B) Food temperature measuring devices shall be calibrated in accordance with manufacturer's specifications as necessary to ensure their accuracy.

(C) Ambient air temperature, water pressure, and water temperature measuring devices shall be maintained in good repair and be accurate within the intended range of use.

4-502.12 Single-Service and Single-Use Articles, Required Use.*

A food establishment without facilities specified under Parts 4-6 and 4-7 for cleaning and sanitizing kitchenware and tableware shall provide only single-use kitchenware, single-service articles, and single-use articles for use by food employees and single-service articles for use by consumers.

4-502.13 Single-Service and Single-Use Articles, Use Limitation.

(A) Single-service and single-use articles may not be reused.

(B) The bulk milk container dispensing tube shall be cut on the diagonal leaving no more than one inch protruding from the chilled dispensing head.

4-502.14 Shells, Use Limitation.

Mollusk and crustacea shells may not be used more than once as serving containers.

4-6 CLEANING OF EQUIPMENT AND UTENSILS

Subparts

Objective

4-601.11 Equipment, Food-Contact Surfaces, Nonfood-Contact Surfaces, and Utensils.*

(A) Equipment food-contact surfaces and utensils shall be clean to sight and touch.

(B) The food-contact surfaces of cooking equipment and pans shall be kept free of encrusted grease deposits and other soil accumulations.[N]

(C) Nonfood-contact surfaces of equipment shall be kept free of an accumulation of dust, dirt, food residue, and other debris.[N]

Frequency

4-602.11 Equipment Food-Contact Surfaces and Utensils.*

(A) Equipment food-contact surfaces and utensils shall be cleaned:

(1) Except as specified in ¶ (B) of this section, before each use with a different type of raw animal food such as beef, fish, lamb, pork, or poultry;

(2) Each time there is a change from working with raw foods to working with ready-to-eat foods;

(3) Between uses with raw fruits and vegetables and with potentially hazardous food;

(4) Before using or storing a food temperature measuring device; and

(5) At any time during the operation when contamination may have occurred.

(B) *Subparagraph (A)(1) of this section does not apply if the food-contact surface or utensil is in contact with a succession of different raw animal foods each requiring a higher cooking temperature as specified under § 3-401.11 than the previous food, such as preparing raw fish followed by cutting raw poultry on the same cutting board.*

(C) Except as specified in ¶ (D) of this section, if used with potentially hazardous food, equipment food-contact surfaces and utensils shall be cleaned throughout the day at least every 4 hours.

(D) *Surfaces of utensils and equipment contacting potentially hazardous food may be cleaned less frequently than every 4 hours if:*

(1) *In storage, containers of potentially hazardous food and their contents are maintained at temperatures specified under Chapter 3 and the containers are cleaned when they are empty;*

(2) *Utensils and equipment are used to prepare food in a refrigerated room or area that is maintained at one of the temperatures in the following chart and:*

(a) The utensils and equipment are cleaned at the frequency in the following chart that corresponds to the temperature:

Temperature	**Cleaning Frequency**
5.0°C (41°F) or less	24 hours
>5.0°C - 7.2°C (>41°F - 45°F)	20 hours
>7.2°C - 10.0°C (>45°F - 50°F)	16 hours
>10.0°C - 12.8°C (>50°F - 55°F)	10 hours

; and

(b) The cleaning frequency based on the ambient temperature of the refrigerated room or area is documented in the food establishment.

(3) *Containers in serving situations such as salad bars, delis, and cafeteria lines hold ready-to-eat potentially hazardous food that is maintained at the temperatures specified under Chapter 3, are intermittently combined with additional supplies of the same food that is at the required temperature, and the containers are cleaned at least every 24 hours;*

(4) *Temperature measuring devices are maintained in contact with food, such as when left in a*

container of deli food or in a roast, held at temperatures specified under Chapter 3;

(5) *Equipment is used for storage of packaged or unpackaged food such as a reach-in refrigerator and the equipment is cleaned at a frequency necessary to preclude accumulation of soil residues;*

(6) *The cleaning schedule is approved based on consideration of:*

(a) *Characteristics of the equipment and its use,*

(b) *The type of food involved,*

(c) *The amount of food residue accumulation, and*

(d) *The temperature at which the food is maintained during the operation and the potential for the rapid and progressive multiplication of pathogenic or toxigenic microorganisms that are capable of causing foodborne disease.*

;or,

(7) *In-use utensils are intermittently stored in a container of water in which the water is maintained at 60°C (140°F) or more and the utensils and container are cleaned at least every 24 hours or at a frequency necessary to preclude accumulation of soil residues.*

(E) *Except when dry cleaning methods are used as specified under § 4-603.11*, surfaces of utensils and equipment contacting food that is not potentially hazardous shall be cleaned:[N]

(1) At any time when contamination may have occurred;

(2) At least every 24 hours for iced tea dispensers and consumer self-service utensils such as tongs, scoops, or ladles;

(3) Before restocking consumer self-service equipment and utensils such as condiment dispensers and display containers; and

(4) In equipment such as ice bins and beverage dispensing nozzles and enclosed components of equipment such as ice makers, cooking oil storage tanks and distribution lines, beverage and syrup dispensing lines or tubes, coffee bean grinders, and water vending equipment:

(a) At a frequency specified by the manufacturer, or

(b) Absent manufacturer specifications, at a frequency necessary to preclude accumulation of soil or mold.

4-602.12 Cooking and Baking Equipment.

(A) The food-contact surfaces of cooking and baking equipment shall be cleaned at least every 24 hours. *This section does not apply to hot oil cooking and filtering equipment if it is cleaned as specified in Subparagraph 4-602.11(D)(6).*

(B) The cavities and door seals of microwave ovens shall be cleaned at least every 24 hours by using the manufacturer's recommended cleaning procedure.

4-602.13 Nonfood-Contact Surfaces.

Nonfood-contact surfaces of equipment shall be cleaned at a frequency necessary to preclude accumulation of soil residues.

Methods

4-603.11 Dry Cleaning.

(A) If used, dry cleaning methods such as brushing, scraping, and vacuuming shall contact only surfaces that are soiled with dry food residues that are not potentially hazardous.

(B) Cleaning equipment used in dry cleaning food-contact surfaces may not be used for any other purpose.

4-603.12 Precleaning.

(A) Food debris on equipment and utensils shall be scrapped over a waste disposal unit, scupper, or garbage receptacle or shall be removed in a warewashing machine with a prewash cycle.

(B) If necessary for effective cleaning, utensils and equipment shall be preflushed, presoaked, or scrubbed with abrasives.

4-603.13 Loading of Soiled Items, Warewashing Machines.

Soiled items to be cleaned in a warewashing machine shall be loaded into racks, trays, or baskets or onto conveyors in a position that:

(A) Exposes the items to the unobstructed spray from all cycles; and

(B) Allows the items to drain.

4-603.14 Wet Cleaning.

(A) Equipment food-contact surfaces and utensils shall be effectively washed to remove or completely loosen soils by using the manual or mechanical means necessary such as the application of detergents containing wetting agents and emulsifiers; acid, alkaline, or abrasive cleaners; hot water; brushes; scouring pads; high-pressure sprays; or ultrasonic devices.

(B) The washing procedures selected shall be based on the type and purpose of the equipment or utensil, and on the type of soil to be removed.

4-603.15 Washing, Procedures for Alternative Manual Warewashing Equipment.

If washing in sink compartments or a warewashing machine is impractical such as when the equipment is fixed or the utensils are too large, washing shall be done by using alternative manual warewashing equipment as specified in ¶ 4-301.12(C) in accordance with the following procedures:

(A) Equipment shall be disassembled as necessary to allow access of the detergent solution to all parts;

(B) Equipment components and utensils shall be scrapped or rough cleaned to remove food particle accumulation; and

(C) Equipment and utensils shall be washed as specified under ¶ 4-603.14(A).

4-603.16 Rinsing Procedures.

Washed utensils and equipment shall be rinsed so that abrasives are removed and cleaning chemicals are removed or diluted through the use of water or a detergent-sanitizer solution by using one of the following procedures:

(A) Use of a distinct, separate water rinse after washing and before sanitizing if using:

(1) A 3-compartment sink,

(2) Alternative manual warewashing equipment equivalent to a 3-compartment sink as specified in ¶ 4-301.12(C), or

(3) A 3-step washing, rinsing, and sanitizing procedure in a warewashing system for cip equipment;

(B) Use of a detergent-sanitizer as specified under § 4-501.115 if using:

(1) Alternative warewashing equipment as specified in ¶ 4-301.12(C) that is approved for use with a detergent-sanitizer, or

(2) A warewashing system for cip equipment;

(C) Use of a nondistinct water rinse that is integrated in the hot water sanitization immersion step of a 2-compartment sink operation;

(D) If using a warewashing machine that does not recycle the sanitizing solution as specified under ¶ (E) of this section, or alternative manual warewashing equipment such as sprayers, use of a nondistinct water rinse that is:

(1) Integrated in the application of the sanitizing solution, and

(2) Wasted immediately after each application; or

(E) If using a warewashing machine that recycles the sanitizing solution for use in the next wash cycle, use of a nondistinct water rinse that is integrated in the application of the sanitizing solution.

4-603.17 Returnables, Cleaning for Refilling.*

(A) Except as specified in ¶¶ (B) and (C) of this section, returned empty containers intended for cleaning and refilling with food shall be cleaned and refilled in a regulated food processing plant.

(B) *A food-specific container for beverages may be refilled at a food establishment if:*

(1) *Only a beverage that is not a potentially hazardous food is used as specified under ¶ 3-304.17 (A);*

(2) *The design of the container and of the rinsing equipment and the nature of the beverage, when considered together, allow effective cleaning at home or in the food establishment;*

(3) *Facilities for rinsing before refilling returned containers with fresh, hot water that is under pressure and not recirculated are provided as part of the dispensing system;*

(4) *The consumer-owned container returned to the food establishment for refilling is refilled for sale or service only to the same consumer; and*

(5) *The container is refilled by:*

(a) *An employee of the food establishment, or*

(b) *The owner of the container if the beverage system includes a contamination-free transfer process that can not be bypassed by the container owner.*

(C) *Consumer-owned containers that are not food-specific may be filled at a water vending machine or system.*

4-7 SANITIZATION OF EQUIPMENT AND UTENSILS

Subparts

Objective

4-701.10 Food-Contact Surfaces and Utensils.

Equipment food-contact surfaces and utensils shall be sanitized.

Frequency

4-702.11 Before Use After Cleaning.*

Utensils and food-contact surfaces of equipment shall be sanitized before use after cleaning.

Methods

4-703.11 Hot Water and Chemical.*

After being cleaned, equipment food-contact surfaces and utensils shall be sanitized in:

(A) Hot water manual operations by immersion for at least 30 seconds and as specified under § 4-501.111;

(B) Hot water mechanical operations by being cycled through equipment that is set up as specified under §§ 4-501.15, 4-501.112, and 4-501.113 and achieving a utensil surface temperature of 71°C (160°F) as measured by an irreversible registering temperature indicator; or

(C) Chemical manual or mechanical operations, including the application of sanitizing chemicals by immersion, manual swabbing, brushing, or pressure spraying methods, using a solution as specified under § 4-501.114 by providing:

(1) Except as specified under Subparagraph (C)(2) of this section, an exposure time of at least 10 seconds for a chlorine solution specified under ¶ 4-501.114(A),

(2) An exposure time of at least 7 seconds for a chlorine solution of 50 mg/L that has a pH of 10 or less and a temperature of at least 38°C (100°F) or a pH of 8 or less and a temperature of at least 24°C (75°F),

(3) An exposure time of at least 30 seconds for other chemical sanitizing solutions, or

(4) An exposure time used in relationship with a combination of temperature, concentration, and pH that, when evaluated for efficacy, yields sanitization as defined in Subparagraph 1-201.10(B)(72).

4-8 LAUNDERING

Subparts

Objective

4-801.11 Clean Linens.

Clean linens shall be free from food residues and other soiling matter.

Frequency

4-802.11 Specifications.

(A) Linens that do not come in direct contact with food shall be laundered between operations if they become wet, sticky, or visibly soiled.

(B) Cloth gloves used as specified in ¶ 3-304.15(D) shall be laundered before being used with a different type of raw animal food such as beef, lamb, pork, and fish.

(C) Linens and napkins that are used as specified under § 3-304.13 and cloth napkins shall be laundered between each use.

(D) Wet wiping cloths shall be laundered daily.

(E) Dry wiping cloths shall be laundered as necessary to prevent contamination of food and clean serving utensils.

Methods

4-803.11 Storage of Soiled Linens.

Soiled linens shall be kept in clean, nonabsorbent receptacles or clean, washable laundry bags and stored and transported to prevent contamination of food, clean equipment, clean utensils, and single-service and single-use articles.

4-803.12 Mechanical Washing.

(A) Except as specified in ¶ (B) of this section, linens shall be mechanically washed.

(B) *In food establishments in which only wiping cloths are laundered as specified in ¶ 4-301.15(B), the wiping cloths may be laundered in a mechanical washer, sink designated only for laundering wiping cloths, or a warewashing or food preparation sink that is cleaned as specified under § 4-501.14.*

4-803.13 Use of Laundry Facilities.

(A) Except as specified in ¶ (B) of this section, laundry facilities on the premises of a food establishment shall be used only for the washing and drying of items used in the operation of the establishment.

(B) *Separate laundry facilities located on the premises for the purpose of general laundering such as for institutions providing boarding and lodging may also be used for laundering food establishment items.*

4-9 PROTECTION OF CLEAN ITEMS

Subparts

Drying

4-901.11 Equipment and Utensils, Air-Drying Required.

After cleaning and sanitizing, equipment and utensils:

(A) Shall be air-dried or used after adequate draining as specified in ¶ (a) of 21 CFR 178.1010 Sanitizing solutions, before contact with food; and

(B) May not be cloth dried *except that utensils that have been air-dried may be polished with cloths that are maintained clean and dry.*

4-901.12 Wiping Cloths, Air-Drying Locations.

Wiping cloths laundered in a food establishment that does not have a mechanical clothes dryer as specified in ¶ 4-301.15(B) shall be air-dried in a location and in a manner that prevents contamination of food, equipment, utensils, linens, and single-service and single-use articles and the wiping cloths. *This section does not apply if wiping cloths are stored after laundering in a sanitizing solution as specified under § 4-501.114.*

Lubricating and Reassembling

4-902.11 Food-Contact Surfaces.

Lubricants shall be applied to food-contact surfaces that require lubrication in a manner that does not contaminate food-contact surfaces.

4-902.12 Equipment.

Equipment shall be reassembled so that food-contact surfaces are not contaminated.

Storing

4-903.11 Equipment, Utensils, Linens, and Single-Service and Single-Use Articles.

(A) Except as specified in ¶ (D) of this section, cleaned equipment and utensils, laundered linens, and single-service and single-use articles shall be stored:

(1) In a clean, dry location;

(2) Where they are not exposed to splash, dust, or other contamination; and

(3) At least 15 cm (6 inches) above the floor.

(B) Clean equipment and utensils shall be stored as specified under ¶ (A) of this section and shall be stored:

(1) In a self-draining position that allows air drying; and

(2) Covered or inverted.

(C) Single-service and single-use articles shall be stored as specified under ¶ (A) of this section and shall be kept in the original protective package or stored by using other means that afford protection from contamination until used.

(D) *Items that are kept in closed packages may be stored less than 15 cm (6 inches) above the floor on dollies, pallets, racks, and skids that are designed as specified under § 4-204.122.*

4-903.12 Prohibitions.

(A) Except as specified in ¶ (B) of this section, cleaned and sanitized equipment, utensils, laundered linens, and single-service and single-use articles may not be stored:

(1) In locker rooms;

(2) In toilet rooms;

(3) In garbage rooms;

(4) In mechanical rooms;

(5) Under sewer lines that are not shielded to intercept potential drips;

(6) Under leaking water lines including leaking automatic fire sprinkler heads or under lines on which water has condensed;

(7) Under open stairwells; or

(8) Under other sources of contamination.

(B) *Laundered linens and single-service and single-use articles that are packaged or in a facility such as a cabinet may be stored in a locker room.*

Handling

4-904.11 Kitchenware and Tableware.

(A) Single-service and single-use articles and cleaned and sanitized utensils shall be handled, displayed, and dispensed so that contamination of food- and lip-contact surfaces is prevented.

(B) Knives, forks, and spoons that are not prewrapped shall be presented so that only the handles are touched by employees and by consumers if consumer self-service is provided.

(C) Except as specified under ¶ (B) of this section, single-service articles that are intended for food- or lip-contact shall be furnished for consumer self-service with the original individual wrapper intact or from an approved dispenser.

4-904.12 Soiled and Clean Tableware.

Soiled tableware shall be removed from consumer eating and drinking areas and handled so that clean tableware is not contaminated.

4-904.13 Preset Tableware.

If Tableware is preset:

(A) It shall be protected from contamination by being wrapped, covered, or inverted;

(B) Exposed, unused settings shall be removed when a consumer is seated; or

(C) Exposed, unused settings shall be cleaned and sanitized before further use if the settings are not removed when a consumer is seated.

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